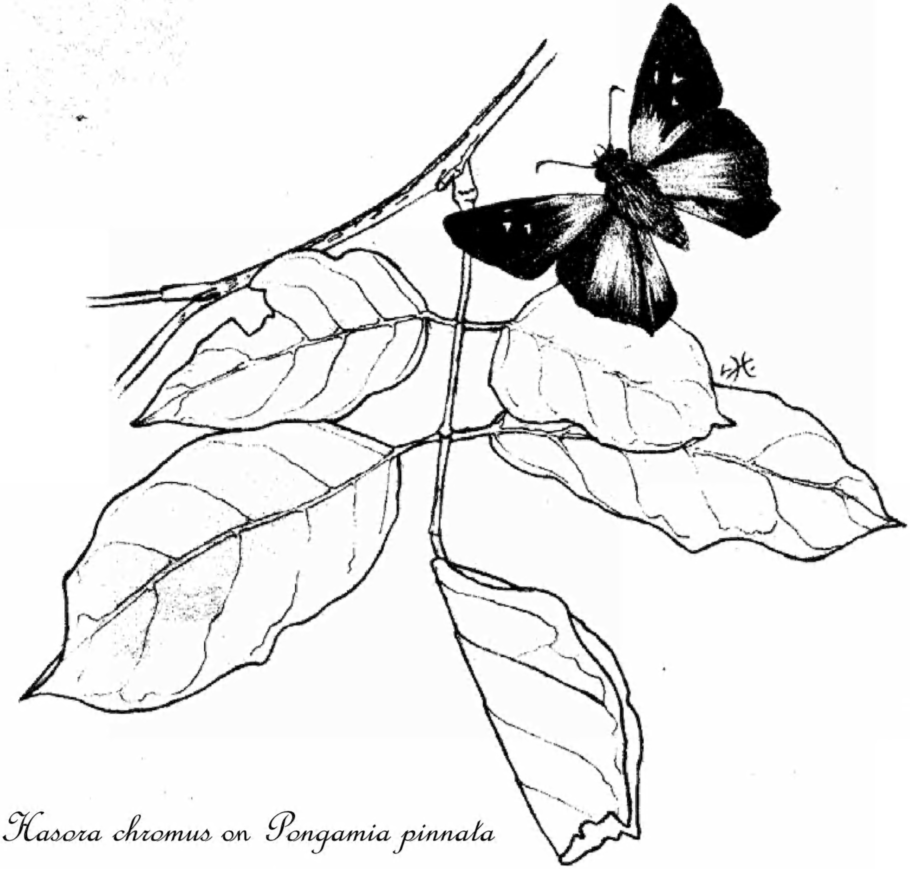

Hasora chromus on Pongamia pinnata

Butterfly & Other Invertebrates Club Inc. Newsletter

ISSUE NO: 23 DATE: DECEMBER, 2001 ISSN: 1236-0006

CLUB PLANNING AND ORGANIZING GROUP - 2001

President:	Helen Schwencke	07 3844 6677
Vice President:	John Moss	07 3245 2997
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Register of Host Plants:	Rob MacSloy	07 3824 4348
Publicity:	Lois Hughes	07 3206 6229

PLANNING AND ORGANIZATION MEETINGS

A quarterly meeting is scheduled in order to plan club activities and the newsletter. See BOIC Programme.

CONTACT ADDRESS

PO Box 2113, Runcorn 4113, Queensland

AIMS OF ORGANIZATION

- To establish a network of people growing butterfly host plants;
- To hold information meetings about invertebrates;
- To organize excursions around the theme of invertebrates e.g. butterflies, fireflies, ants, dragonflies, beetles, freshwater habitats, and others;
- To promote the conservation of the invertebrate habitat;
- To promote the keeping of invertebrates as alternative pets;
- To promote research into invertebrates;
- To encourage the construction of invertebrate friendly habitats in urban areas.

NEWSLETTER DEADLINES

If you want to submit an item for publication the following deadlines apply:
March issue – February 21st
June issue – May 21st
September issue – August 21st
December issue – November 21st

PRESIDENT'S POSTING

Seasons Greetings. Welcome to our 23rd issue. October marked our 7th anniversary and we have been growing steadily. One of our projects in this time has been the production of the 'Lifecycles of the Swallowtail Butterflies' poster. This makes an excellent present for people with an interest in the environment. Help us to develop our program further by buying multiple copies as gifts.

Our AGM will be held in March. Please consider becoming involved with your Club. We have the position of Secretary to be filled. Taking on a role as an Office bearer or on the planning committee gives you access to lots of interesting information, as ideas are freely shared in our meetings. We are a welcoming group.

Do you have a butterfly garden you'd be happy for club members to visit? We are considering a garden tour for autumn. Please let me know if you're interested in being a host.

Helen Schwencke

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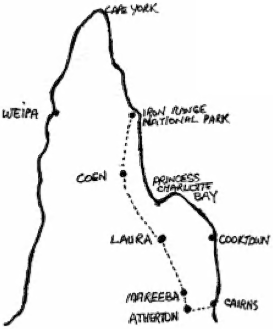
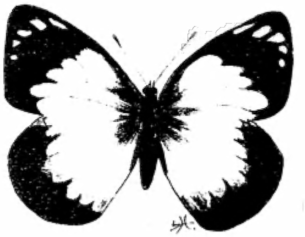
Highlights of the Iron Range Expedition (Part 2)

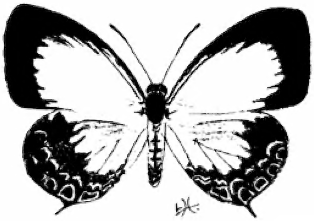


During the second day at Iron Range we spent the time productively on the Lamond and Philips Hills. These two hills are about half a kilometer apart and are joined by a saddle. About halfway up the ascent from the road we diverted along a short spur known to butterfly people as Cleon Ridge from the name of the "Splendid Jewel" that is often found there. Sadly no *Hypochrysops cleon* were observed but the Narcissus Jewel (*H. narcissus)* was and also the Twin Dusky-blue (*Candalides geminus*). After struggling through a delaying area of Lawyer Vine we reached the saddle and turned right to Philips Hill. We had with us several bait traps as the Orange Emperor (*Charaxes latona*) has been collected here. They were set up (and subsequently on Lamond Hill) but the persistent high wind quickly dissipated the odour plumes so that no success was achieved. We did however sight one male perched head downwards about twenty metres above us.

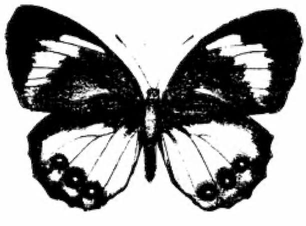


Delias mysis

The usual population of skippers [including the rare Small Darter (*Telicota brachydesma*) and the elusive Dark Orange Darter (*T. ohara*)], small satyrids, grass yellows and pearl whites [including the locally endemic Cape York Pearl-white (*Elodina claudia*)] were seen on both these hills, together with the more striking Golden Jezebel (*Delias aruna inferna*), Red-banded Jezebel (*Delias mysis waterhousi*), Yellow-banded Jezebel (*Delias ennia* tindali), Red Lacewing (*Cethosia cydippe chrysippe*), Northern Birdwing (*Ornithoptera priamus macalpini*) and Ulysses Swallowtail (*Papilio ulysses joesa*).

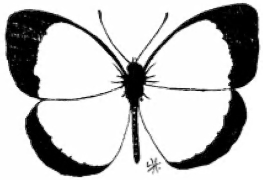


Jamides cyta claudia



Elymnias agondas

After descending the hills we encountered other species along the road to Portland Roads (the World War II harbour). Amongst these were the unusual satyrid, the Australian Palmfly (*Elymnias agondas*) which appears to be a mimic of the toxic crow butterflies, and the very beautiful Lycaenid, the Pale Cerulean (*Jamides cyta claudia*) otherwise known as the Claudie River Blue. This Australian subspecies only occurs along the Claudie River at Iron Range.



Eurema puella

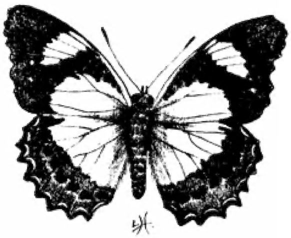
The next day was again spent on the Portland Roads road but this time we travelled further towards the coast to a sandstone ridge where we hoped to find the skipper *Trapezites heteromacula*. Although this proved fruitless we were again successful with *Telicota ohara,* Black-spotted Flash (*Hypolycaena phorbas phorbas*)*,* Purple Cerulean (*Jamides phaseli*), Dark Ciliated-blue (*Anthene seltuttus*), Dark Forest-blue (*Pseudodipsas eone*) and several other species. Before reaching the ridge a single specimen of the Paradise Jewel (*Hypochrysops hippuris*) was encountered. We broke camp the next morning to start our return journey and leave behind the rain clouds, stopping at many and varied sites along the road out. Butterflies were plentiful and diverse as the road wound through rainforest along the banks of several streams. Pockets of strong sunlight caused many butterflies to congregate there and the Blue-banded Eggfly (*Hypolimnas alimena lamina*) and Broad-margined Grass-yellow (*Eurema puella*) were added to our list. That night we camped again at the Archer River crossing and the hot shower and cold drinks were most welcome.

Yoma sabina

Next morning saw us on our way to Coen where we diverted to the Old Telegraph Line track to investigate some dry vine scrub. Here we found an abundance of Purple and Shining Oak-blues (*Arhopala centaurus centaurus* and *A. micale amytis*). Lurchers (*Yoma sabina parva*) and Royal Jewels (*Hypochrysops polycletus rovena*) were also seen. Our collecting was then cut short as we suffered two tyre failures which meant that we had to camp at Laura overnight while repairs were made.

The following day en route to Cooktown we stopped briefly at Isabella Creek Falls where several species of skippers including the rare Northern Sedge-darter (*Telicota eurotas*) were seen but the local dry conditions limited the range of general species that we had expected to see. Further on we spent some time on the McIvor River Road and there found *Philiris* larvae on roadside *Macaranga involucrata* – hopefully they will prove to be the Sapphire Moonbeam (*Philiris sappheira*). After lunch at Cooktown we took the coast road to Cairns. A few kilometers before Ayton we stopped at a sunlit area of lantana and a low, blue flowered weedy plant where literally dozens of *Delias mysis* e*mysis* were congregated.

The Red Lacewing (*Cethosia cydippe chrysippe*), Yellow-banded Jezebel (*Delias ennia nigidius*) and an abundance of diverse species were also in attendance.


Cethosia cydippe chrysippe

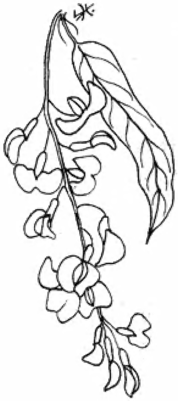
After overnighting at Cairns our only major stop was at Fishery Falls near Gordonvale where once again we encountered a broad range of species from most families and added several of these to our list. The highlights included Green-spotted Triangles (*Graphium agamemnon*), Tailed Rustics (=Vagrants) (Vagrans egista), Orange Planes (*Pantoporia consimilis*) and more Red Lacewings, Dark Orange and Small Darters. Our last short collecting stop of the trip was about forty kilometers south of Cardwell where a promising patch of mangroves produced a couple of Copper Jewels (*Hypochrysops apelles*).

All in all considering the limited time we had at our disposal we all agreed that the trip was eminently successful.

Graham Forbes

****

Indigiscapes Weekend Expo – 4th and 5th August, 2001



Despite overnight and early morning showers, the sunny, though cool conditions, enticed a steady stream of visitors outdoors, to enjoy the wonderful bushland setting, visit the Centre and the many and varied displays inside and out.

The Club was allocated the delightful Wedding Gazebo in the Wild Herb Garden and we displayed our Club attractively taking full advantage of our amenities.

We made many new converts, who happily went home to add the purchased butterfly host plants to their gardens in expectation of warm weather visitors to lay their eggs on and then chew them up! Others purchased our educational and informative booklets, posters and host plant lists. The children were delighted with the free bookmarks and mobiles.

We joined new members, caught up with others we seldom see and talked butterflies with anyone who would listen. We had a surprisingly large number of books for people to browse through as well as a large photographic display which prompted many questions.

My butterfly cards and prints gave people a greater appreciation of their beauty and in the case of the Laced Fritillary print, a greater awareness of its vulnerability and the measures we can take to help preserve it. In all a very successful weekend.

Lois Hughes

****

SGAP Spring Flower and Plant Show – 8th and 9th September, 2001

The lower floor of the Mt. Gravatt Showground Hall was a feast for the senses. The colours, textures, shapes and perfume of the floral displays had to be seen to be appreciated and they were all natives grown in the Brisbane area. It was in amongst this setting that we mounted our own delightful display. With posters, photos and books, newsletters, cards, paintings and plants to inform, delight and educate. The people came in large numbers to appreciate the beauty of Australia's native plants and then moved upstairs for more displays, books, cut flowers and arrangements for sale. Outside many growers had combined to present the plant sales, some rare and difficult to obtain.

Once more it was a time for catching up with current BOIC members unable to go on excursions, for joining up new members and making people aware of how easy it is to have more beautiful butterflies resident in our backyards simply by growing their host plants.

Daphne fascinated many as she tatted her tiny butterflies and added them to her gum leaf bookmarks. Frank drew admiring comments with his pot of multi-coloured Arrowhead Violets, white, deep purple and a pale white striped lavender, growing together, as well as the three varieties of unusually shaped and coloured Pseuderanthemum. You never know what little surprised you'll find at our displays. We could always do with more helpers so if you would like to help we would welcome you, just call Daphne or Lois.

Lois Hughes

EXCURSION REPORTS

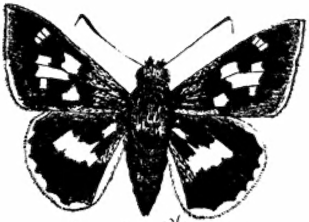
Tweed Valley Excursion – 30.9.01

After some early cloud we had a fine warm day for our first Club trip "south of the border". Some Brisbane members met at Doug and Jeannie White's home at Southport where we sighted our first butterflies for the day - Orchard Swallowtail (*Papilio aegeus*) and Large Grass-yellow (*Eurema hecabe*). Two cicadas – Black Tree Ticker (*Birrima varians*) and Sprinkler Squeaker (*Pauropsalta annulata*) – were also recorded.

Doug was then kind enough to take us to Burleigh Knoll Conservation Park where we completed a short circuit.

In what was to be a common feeling during the day we were shocked by the extreme dry conditions and given this we were probably lucky to record as many species as we did.

Butterflies encountered (sorry Ross!) included Lemon Migrant (*Catopsilia pomona*), Yellow Migrant (*Catopsilia gogophone*), Purple Crow (*Euploea tulliolus*), Blue Tiger (*Tiramula hamata*), Evening Brown (*Melanitis leda*), Splendid Ochre (*Trapezites symmomus),* Green (or?Greenish) Darter (*Telicota ancilla),* Wide-brand Grass-Dart (*Suniana sunias*) and Large Purple Line-blue (*Nacaduba berenice*).


Trapezites symmomus

A good example of a Corkwood (*Endiandra sieberi*), a host plant for the Bronze Flat (*Netrocoryne repanda*), was seen but unfortunately no adults or larva of this attractive skipper were seen. Other points of interest were a Chrysomelidae Beetle on a Hop Bush (*Dodonaea triquetra*) and an Arachnid (*Opillones* sp) – a relative of Harvestmen - and the continual noise of Little Wattle Birds, Noisy Friar Birds and Lorikeets both Rainbow and Scaly Breasted.

The birds nearly drowned out the call of the only cicada recorded – the Paperbark Cicada (*Cicadetta hackeri*).

We also saw a large hive of European Honey Bees who had appropriated an old termite nest.

We then headed off to our rendezvous at Kingscliffe where we met up with our guide Greg Newland along with some of our "Mexican friends" Felix Jenkins and family and ranger Allan Goodwin. It was good to see some new faces at our excursion.

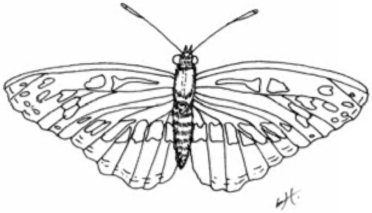
Hesperilla picta

Our first stop was the Pottsville Environmental Park where we had lunch. Greg then took us around one of the walking tracks. New butterflies seen were Blue Triangle (*Graphium sarpedon*), Monarch (*Danaus plexippus*), Brown Ringlet (*Hypocysta metirius*), Common Crow (*Euploea core*), Varied Swordgrass Brown (*Tisiphone abeona morrisi*) and larvae of the Painted Sedge Skipper (*Hesperilla picta*) on its host plant, *Gahnia clarkei*. Cicadas were also very conspicuous by their absence with only Paperbark Cicada (*Cicadetta hackeri*) and Lesser Bottle Cicada (not yet described) being noted.

An unusual sighting was a species of case moth on its host plant – Cheese Tree (*Glochidion ferdinandi*). Long black and flattened in shape it was certainly very different from the common casemoth larva one sees pulling its house of twigs around.

We then moved on to our final spot – Cudgen Nature Reserve where a feature was the abundance of *Gahnia clarkei* (although no Swordgrass Browns were evident) and the large numbers of *Hoya australis* vines. This last named is one of the host plants for the Common Crow, which was present.

New butterflies for the day were White-banded Plane (*Phaedyma shepherdi*), Black Jezebel (*Delias nigrina*), Leafwing (*Doleschallia bisaltide*) and Common Pencilled-blue (*Candalides absimilis*). No new cicadas were added to the unsubstantial list.



Phaedyma shepherdi

We finished our walk mid afternoon and all wended their various ways home – not a large number of species recorded but great to see some new faces.

Rob Macsloy

****

Kholo Enviroplan Reserve (now Cameron Scrub Reserve) near Pine Mountain, Ipswich. Sunday 4th November 2001.

As for our previous visits we met initially at the Kholo Botanic Gardens on the Brisbane River and thence proceeded northwest up Riverside Drive (past Pine Mountain on the southwest) to the council access gate, where we left the vehicles. We walked firstly downhill and then climbed up the newly-graded red earth easement road, past the cattle yards and thru the main gate into the reserve proper.

According to the Ipswich City Council's Conservation Planning Officer, this recently created 44 ha reserve, consisting of river flat and vine scrub, had finally been given a permanent name "Cameron Scrub Reserve", although just whom Cameron was could not be then established! (As in previous visits, the Club is forwarding reports on our findings to the Council for its biodiversity records.)

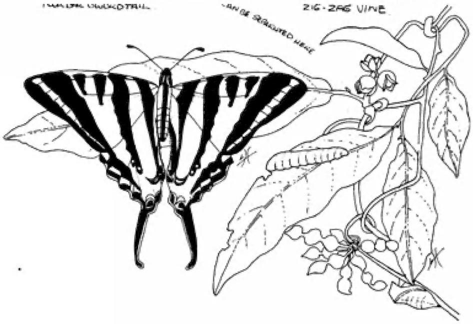
Following the main track down towards the Brisbane River, it wasn't long before we had encountered our first creature of interest – actually eggs and first instar larvae of the Big Greasy (=Clearwing Swallowtail) *Cressida cressida* on the exotic and toxic Dutchman's Pipevine (*Aristolochia elegans*). Some of these were collected by Frank and Cory in order to establish whether they would survive and complete their life cycle on this plant. There is some evidence for this, and it is known that the larvae will go through on the flower of *A. elegans* and related exotics. So far the results don't appear to be too promising.

Other notable hostplant findings included *Capparis arborea* and *C. sarmentosa* which are known hosplants for Caper White (*Belenois java*), Caper (=Australian) Gull (*Cepora perimale*) and the Pearl/Chalk Whites (*Elodina* spp.) of which we had previously identified 3 species at this site. On this occasion those captured were the Chalk White (=Striated Pearl-white) *Elodina parthia* and the Narrow-winged Pearl-white, *Elodina padusa*, of which the latter was new to this site.

Burny Vine or *Malaisia scandens* (=*Trophis scandens*) as usual was in evidence, with little if any fresh new growth. This is the hostplant for the Purple Crow (*Euploea tulliolus*) which did not appear to be on the wing. It had been seen at this site on previous occasions. On the other hand Blue Tigers (*Tirumala hamata*) were on the wing, and their hostplant, the Corky Milk Vine (*Secamone elliptica*) was showing copious new growth. Monarchs (*Danaus plexippus*) [pronounced "play-zip-us"] were also flying (as were Lesser Wanderers (*Danaus chrysippus*) [pron. "cry-sip-us"] and a larva of the former was found on their hostplant the exotic Milkweed, Cotton Bush or Swan Plant (*Gomphocarpus fruiticosa*).

Belonis java

Although we were not able to find its hostplant (*Senna surratensis*), several of us were treated (some for the first time) to the sight of what appeared to be a fresh Orange Migrant (*Catopsilia scylla*). This is a rare butterfly in South-east Queensland and another first for this site. Coincidentally, Lindsay Popple reported seeing it in his Carina garden a week or so previously. (Good sighting Lindsay – humble pie for the doubters!!)

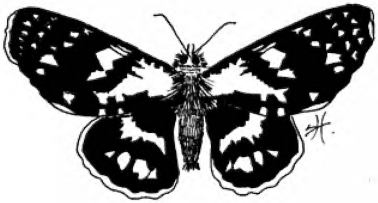


Protographium leosthenes on *Melodorum leichhardtii*

As exciting as that was, the real highlight was the sighting (and for Cory and dad Garth, the capture for the first time) of freshly emerged and fully tailed adult Four-barred Swordtails (*Protographium leosthenes*). One had been seen on a previous occasion at this site, but this was fairly obviously their main emergence time. We were curious however, as to why the hostplant Rauwenhoffia or Zig-Zag Vine [*Melodorum* (= *Rauwenhoffia*) *leichhardtii*] did not appear to have any fresh new growth. Perhaps the recent heavy rains will reverse that and the presumed egglaying may not have been mistimed at all. For further information on this species and its hostplant see Issue No.18 Creature Feature and Plant Profile.

Amongst the other species sighted were Orchard and Chequered Swallowtails, Blue and Pale Triangles, Caper Whites and Caper Gulls, Common Albatross, the Large (or Common) Grass-yellow, Evening Brown, Common Crow, Glasswing, Common Aeroplane (or White-banded Plane!), Painted Lady and Meadow Argus.

Both Lycaenids (Blues, Coppers etc) and Hesperiids (Skippers, Darters etc) were in short supply, but observed for the first time at this site were the No-brand Grass-dart (*Taractrocera ina*), Long-tailed Pea-blue (*Lampides boeticus*) and Spotted Pea-blue or Cupid (*Euchrysops cnejus*).



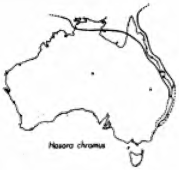
Agarista agricola

These five new species records bring to 52 the total of butterflies noted for this reserve. Just as we were departing I was privileged to see a large female Joseph's Coat Moth (*Agarista agricola*) which I took alive and subsequently got it to pose for some very pretty photographs.

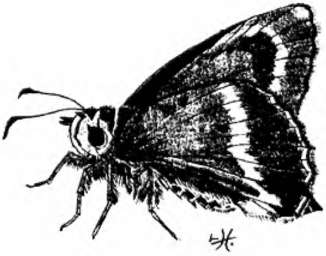
John Moss

CREATURE FEATURE

The Chrome Awl – *Hasora chromus*



The Chrome Awl (*Hasora chromus*) is a widespread species of skipper (in the subfamily Coeliadinae) which ranges from China and India, through south-east Asia to Australia. Within Australian limits it has been recorded from the Northern Territory and along the east coast from the Torres Strait islands to Mackay and again at Brisbane and Sydney (Braby, 2000).



Hasora chromus (male)

Waterhouse and Lyell (1914) gave the southernmost limit as Mackay, Waterhouse (1932) as Brisbane, Common and Waterhouse (1972) commented that it "appears to be rare in southern Queensland" and Common and Waterhouse (1981) states "rarely (at) Sydney". Braby (2000) suggests that the Sydney and

Brisbane records are those of "vagrants" – referring of course to the butterflies (not the observers!).

Steve Johnson and Peter Valentine (Braby, 2000) suggested that the adults "may be migratory, undertaking major seasonal shifts in geographic range". However, most south-east Queensland based butterfly observers would suggest that the species is well established in suburban Brisbane where its food plant, *Pongamia pinnata* (Fabaceae)? is a commonly planted street tree. The adults are commonly on the wing in late summer/early autumn and there is evidence of an additional late spring to mid-summer brood. The early brood coincides with the flush of new growth of the hostplant which occurs around October/November.

The south-east Queensland hostplant sites where the butterfly occurs include Landsborough (R. Miller pers.com.), Gallipoli Road, Carina, Mt.Gravatt-Capalaba Road at Wishart, Carindale Shopping Centre, Roy St. Thorneside (J. Johnston prop.), Capalaba (especially at the State School), and along Florence St., Wynnum (D. Bowden,pers.com.).

The damage done by the larvae to the terminal new growth of the host tree is considerable if (as is often the case) there is a large larval population. Parasitism appears to be rare in southern Queensland – which may relate to the fact that the natural north Queensland parasites do not occur locally. The mature leaves on the host tree are also attacked by a leaf miner, and commonly every leaf on the tree is so affected, resulting in a most unpleasant appearance. The tree is semi-deciduous and most of the leaves are shed each winter.

McCubbin (1971) notes that the larvae pupate arborally in the leaf shelters on the tree but Don Sands (pers. com.), who knows the species from various parts of south east Asia and Papua New Guinea, suggests that the larvae generally leave the hostplant before pupation. I have seen both situations at the same sites (Capalaba and Thorneside) where there were pupae in shelters on the tree and in dead curled leaves on the ground. It is not clear whether these latter had pupated in leaf shelters on the tree which subsequently shed the leaves, or whether the larvae left the tree and found dead curled leaves on the ground suitable for terrestrial pupation.

Much more study needs to be done on this species biology and ecology before the life cycle and movement patterns are finally elucidated.

John Moss

Note: The cover picture is of a female Chrome Awl on *Pongamia* showing the folded leaf shelter the larvae construct.

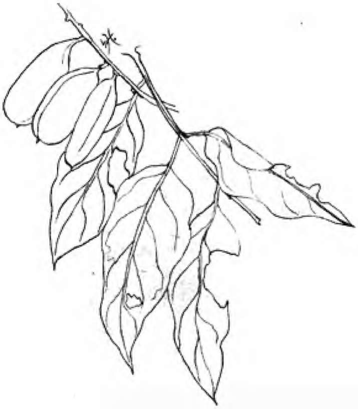
References:

Braby, M.F., 2000 : Butterflies of Australia – Their Identification, Biology and Distribution. CSIRO, Collingwood Vic.

Common, I.F.B. and Waterhouse, D.F., 1972 and 1981 : Butterflies of Australia. Angus and Robertson, Sydney NSW.
Waterhouse, G.A. & Lyell G., 1914 : The Butterflies of Australia. Angus and Robertson, Sydney NSW.

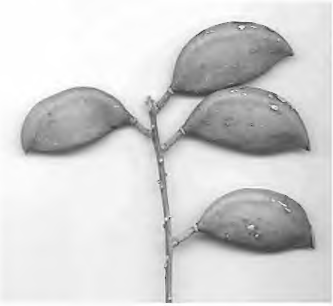
PLANT PROFILE

Further notes on *Pongamia pinnata*



The natural range of this hostplant is from central coastal Queensland to Cape York Peninsula and also in the Northern Territory, Papua New Guinea, Pacific Islands, Indonesia, Malaysia, China and India. Because the tree is widely planted as a street or park species, the Chrome Awl has flourished in Brisbane and surrounding towns.

Its natural habitat is the lowland rainforest, often along beaches and tidal streams, where it attains a height of up to 10 metres. It is easily grown in suburban gardens as far south as Sydney and the Illawarra, and is quite attractive.



As can be seen in Lois' illustration, the leaves are compound with 5 to 7 thin, opposite leaflets of smooth texture and of a pale green colour. The seed pods occur pinnately on terminal racemes (see illustration of scanned specimen). All parts of this plant are reputed to be toxic – but not of course to the Chrome Awl!

There is another undescribed endemic species of *Pongamia* which has narrower leaflets and occurs over much the same range in eastern Queensland, but in upland as well as lowland rainforest. It is quite likely this also will be found to be a hostplant of the Chrome Awl.

There are excellent illustrations of the fruit (seed pods) of both these species in Cooper and Cooper.

John Moss

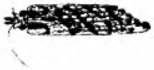
Ref: Cooper, W and Cooper, W.T., 1994 : Fruits of the Rainforest, Readers Digest Press, Sydney

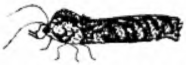
CREATURE NOTE

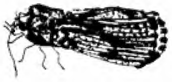
Creature Note # 27 - “Mucuna Moth”

During last August, while searching Daphne’s *Mucuna gigantea* vine for evidence of larvae and shelters of the Green Awl (*Hasora discolor*), we discovered many green and yellow semi-looper Noctuid moth larvae. These had cleverly positioned themselves along the leaf margins in a cryptic manner and would not have been noticed were it not for our searchings, which also turned up larvae of the White-banded Plane (Common Aeroplane butterfly) *Phaedyma shepherdi*.

Mucuna gigantea







I collected three or four specimens which duly pupated in dead leaf shelters on the bottom of the container. They emerged as adult moths about 4 weeks later. I was not able to identify the species which is not figured in Common’s “Moths of Australia”, but it is similar to *Tiracola plagiata* but without the serrations on the outer margin of the forewing. The larva is very similar to that of *Trigonodes hyppasia*. Adults of both species and a larva of the latter are figured in Common.

As can be seen from Lois’ illustrations, the adult moth can fold its wings like roller blinds and closely resemble the stump of a broken twig. This effect reminded me of a European Notodontid moth, *Phalera bucephala* – the Buff-tip – which when settled on a tree or shrub with wings folded has the appearance of a freshly snapped twig, another striking example of cryptic mimicry.

John Moss

Reference: Common, I, 1990: Moths of Australia, Melbourne Uni. Press

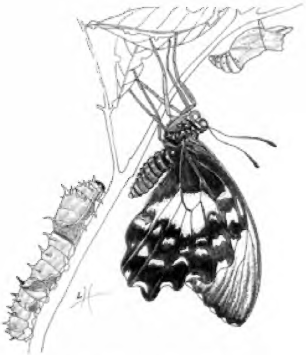
ARE YOU BEING BUGGED BY BUTTERFLIES

When one is a gardener it can be difficult not to have a hostile attitude to all those creepy crawlies that want to munch your favourite plants, particularly when you are expecting tasty fruit. However, most people are able to make an exception in the case of butterflies (or flying flowers if that makes it any easier).

Every butterfly was once a caterpillar and most butterflies rely on only one species of plant or a group of related plants. This means it is unlikely that their caterpillars will gobble up every single one of the plants in your garden. They can damage young plants and they can also be a problem in orchards where a monoculture of one plant can allow the build-up of large numbers of one type of butterfly. Otherwise, in these days of outsourcing everything, I prefer to look on them as natures unpaid pruners.

The other reason that caterpillars don't get out of control is the balance of nature. Everything eats everything else and in the case of butterflies their role in life seems to be to provide food for everything else. Of course, the butterflies don't approve of their role in life and one of the interesting things to observe in butterfly gardening is all the little tricks that the adult butterflies and their caterpillars get up to avoid being eaten.

Fuscous Swallowtail



Orchard Swallowtail

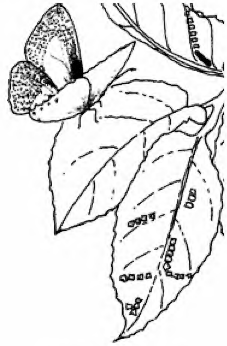
Which brings us to the first butterfly you are likely to find in your fruit and vegetable garden. This is the Orchard Swallowtail and when it is small its caterpillar tries very hard to look like a bird dropping. If it makes it to adulthood it becomes a very large black and white butterfly with a bit of red and blue. The male and female are quite a bit different. The caterpillars feed on plants in the citrus family and are usually found on orange or lemon trees. These trees also support two other butterflies the Fuscous Swallowtail and the Dainty Swallowtail.

Anyone growing a custard apple or soursop is likely to find caterpillars of the Pale Triangle. All caterpillars go through various stages, some with hardly any changes, but these start off mainly black, then a rusty brown and finally green. The chrysalis is green and tries very hard to look like a leaf complete with fake veins. The adult can be yellow, green or blue.

The Blue Triangle is a butterfly that looks similar to the Pale Triangle. In suburbia, its caterpillars feed on the introduced camphor laurel as a substitute for the native laurels that are its usual host plants. It's caterpillars also feed on the leaves of the cinnamon tree whose bark is turned into the spice of the same name. Small white round eggs are laid on the soft red new growth.

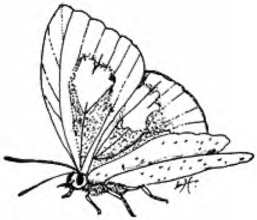
The Purple Moonbeam is a small butterfly with white outside wings and blue or purple inside wings. It has an unusual flattened and dimpled green caterpillar It only eats the underside of the leaf leaving tell-tale tracks which announce its presence to those in the know. It prefers the native sandpaper figs but is also found on the edible European fig whose deciduous leaves have a similar texture.

Zigzag vine (*Melodorum leichhardtii*) is a native fruit in the custard apple family and is another host for the Pale Triangle. It is one of the tastier native fruits. The Four-barred Swallowtail is an attractive butterfly whose caterpillars also feed on the leaves of this plant. It is one of the few Australian swallowtails that actually has tails.



Purple Moonbeam

Millaa Millaa (*Elaeagnus triflora*) is another tasty native fruit. It's a vine with a similar habit to Bougainvillea, sort of sprawling all over the place. The caterpillars of the Indigo Flash butterflies start their lives chewing on the soft flower buds but eventually progress to the soft young leaves. If they run out of leaves these caterpillars can become cannibals, ensuring that at least some make it to adulthood. Sometimes the caterpillars are also found on Longan and Lychee flowers.



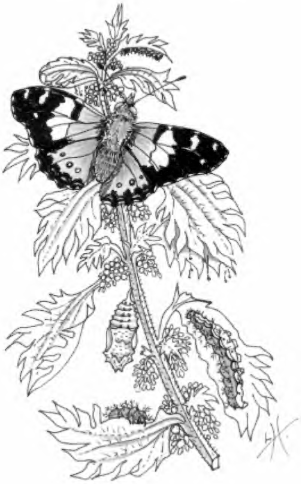
Pencilled Blue

Glasswing

The Macadamia has several small butterflies that use it as a host and unfortunately most of these start out eating the flower buds. One, the Bright Cornelian has a caterpillar that eats the kernel of the nut. It leaves a hole in the shell for waste disposal and plugs it with its heavily armoured rear end (which bizarrely has a smiley face on it!). The other butterflies which can use Macadamia are the Common Pencilled-blue, Hairy Line-blue, Large Purple Line-blue, Purple line-blue and Small-tailed Line-blue. Considering the other moths and beetles that also feed on it, it's no wonder it first became a commercial crop in Hawaii, far away from its native pests.

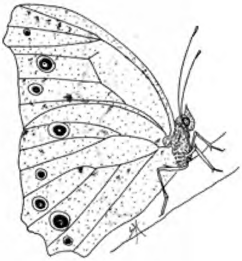
The Glasswing butterfly normally lays a bunch of about forty eggs on the leaves of native passionfruit plants. It has not adapted to the exotic common passionfruit or the granadilla but has managed to sometimes complete its life cycle on the banana passionfruit. Because its caterpillars are communal it can cause a lot of defoliation on an individual plant. It has a pretty chrysalis.

Some people into herbs grow stinging nettle as a medicine and vegetable (it loses its sting when cooked but has a weird texture). Both the European and very similar native stinging nettle are host to the Yellow Admiral butterfly. Its caterpillars can totally defoliate a patch of nettles which usually recover faster than I would like. The caterpillars partially roll up the leaves with silken webbing and this protects them from some predators.



Yellow Admiral

The adult Yellow Admiral is one of a few butterflies that feed on fermenting sap and fruit. The other two are the Evening Brown and the Tailed Emperor. So if you miss some fruit and it falls to the ground you may find these butterflies feeding on it.



Evening Brown

When birds pecked holes in my grapes the Tailed Emperor would come and feed on them. Some people are able to attract this adult butterfly with a bowl of mashed over-ripe bananas and beer.

As more and more exotic fruits are grown people will probably notice other butterflies using them as host plants, particularly if they are closely related to any native host plants. This can only make our gardens even more interesting places.

Tailed Emperor

I have mentioned butterflies in SE Queensland, other areas will have different butterflies. For instance, in North Queensland, the Green Spotted Triangle also uses Soursop. If you want to research the butterflies in your area or perhaps just see colour photos of the ones I've mentioned the authoritative reference book is Butterflies of Australia by Michael Braby. It has a list of host plants grouped by families and distribution maps of all the butterflies. Some of the larger libraries have it in their reference sections

Frank Jordan

WASTE NOT WANT NOT

One of the attractions of living in the suburb of West End in Brisbane is the large numbers of possums that also live there. They have learnt to travel around on the power lines and so avoid the dogs and cats that might trouble them on the ground. They have also found many of the exotic plants in the local gardens much to their liking. The Bauhinias growing along Montague Road were once a favoured feeding area.

The European mulberry I have growing in my backyard came under particular attention this year from the Ringtail and Brushtail possums living in and around the shed. So much so that they managed to polish off the new leaves as fast as the tree grew them and deprived me of the annual crop of mulberries.

In view of the amount of leaves being eaten I was mildly puzzled by the lack of many possum droppings under the tree and which usually indicated which of the street trees were their favourites. The mystery was solved one morning when I happened to notice that there were still a few droppings on the ground. However these were being rapidly buried by some attractive beetles about 8mm long. They were black with a greenish purple iridescent sheen on the front half.

I had seen these beetles in the yard before and had wondered how they made a living there. It was now obvious that they were some sort of dung beetle. I collected a few and took them to the museum where they were identified by Geoff Monteith as *Onthophagus dandalu*. Geoff also pointed out the small projection on the front of the male that allowed it to be distinguished from the female. This beetle is a native and one of about fifteen that can still be found around Brisbane.

Since I was already at the museum I had a look at the display featuring Queensland's vanishing wildlife. One of the threatened creatures turned out to be another species of dung beetle, *Onthophagus apterus*. This was a wingless beetle found in only two locations near Taroom. It is completely black with an unusual triangle pattern on its head. It specialises in wallaby droppings.

Our native dung beetles have now been joined by a large selection of exotic dung beetles introduced to handle the problems posed by the huge number of cow pats produced by the grazing industry. Unfortunately, after the initial introductions little funding was provided to research or monitor the effects of these new beetles.

This has now been partly remedied because the Natural Heritage Trust has provided funding for the two year Queensland Dung Beetle Project. One of its aims is to survey and monitor the current distribution of introduced dung beetles. The project is also collecting native dung beetles breeding on cattle dung and so far 58 of these have been found, two of which are new species which have never been collected before.

In ancient Egypt a type of dung beetle called a scarab was associated with the god Amun and the sun. In those days dung beetles were held in much higher esteem than today.

Possums are not the only creatures providing droppings in my yard. At least five species of skinks are also making their contributions. Being carnivores their droppings are less bulky and have the white spot on one end characteristic of reptiles and birds which don't produce urine as mammals do.

My yard supports a much larger number of skinks than normal thanks to neighbouring lawns. Large numbers of various types of moth caterpillars breed in the lawns. When the small adult moths emerge they look for places to hide and my rather messy garden looks perfect for them. The small skinks feed on the moths and the larger skinks feed on the small skinks.

This produces a large resource of lizard dung and surprisingly this is much sought after by the local disco ants. It is not unusual to see a worker returning to the nest carrying a small brown object with the familiar small white spot. I haven't worked out how to check what these ants actually do with the droppings but they probably feed them to their young in some way.

Disco ants are named not after their dancing skills (for an ant they move at a rather leisurely pace) but because of their round golden abdomens which remind some people of the tight gold pants of the disco era. There are several species of ant that look like this and the one in my yard is *Polyrhachis ammon*. Once again thanks to the Queensland Museum for their identification.

Incidentally, one of these ants will occasionally pick up one of its sisters which folds itself up in an unusual way. These two ants then look like one large ant with a big head and large jaws. If you tap this large ant it will disassemble itself back into two ants just like one of those cartoon transformers. I have seen this many times now but have no idea why it happens.

Modern society has disrupted some of nature's cycles. I often wonder what will happen when the mountains of rubbish produced by modern societies can no longer be buried in landfill sites because they are all full. Perhaps the author of the biblical book of Proverbs had it right when he said "go to the ant, o sluggard, study her ways and learn wisdom." In the meantime I will continue to enjoy the sight of my beautiful iridescent beetles and golden disco ants as they continue their job of recycling waste.

Frank Jordan

ABERRANT ACRAEA

One warm October morning I was out chasing butterflies in my backyard in Kingaroy when I came across what appeared to be an old tattered Lesser Wanderer. However the peculiar gliding flight persuaded me to investigate further. Upon a closer look I immediately realized that this was no Lesser Wanderer, but an aberrant Glasswing (*Acraea andromacha*). This Glasswing that I collected differed greatly from the normal form and probably resulted from a mutation.

The forewings which are normally clear, had a dusting of creamy/yellow coloured scales that covered approximately 2/3 of the wing. The hindwings showed the most variation, as the normally cream areas in the normal form, were in fact a dark, stand out yellow. Inside this yellow of the hindwing was one small black dot, instead of several scattered dots which is normally seen.

This butterfly was a rare and exciting find for me as it showed me the possibility for significant variation within a species. I now keep an eye out for any variation as it improves my understanding of butterflies and it opens my eyes to the wondrous things a butterfly can offer.

Steven Kerkow

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The following letter, dated 9th September, 2001, was received from Noel Wilson

"I've been checking the firefly situation at the Jindalee end of the Mount Ommaney Walkway over the last week or so. To date my very unscientific observations are:

About eight days or more ago - none (probably a bit late 1900hrs or so)
Fri 7 Sept 1830hrs+ - 5, these sightings included one on the ground (I think) flashing twice every second; presumably a female. The others were high flyers
Sat 8 Sep 1820hrs+ - 9, all high flyers
Sun 9 Sep 1820hrs+ - 12 mostly high flyers, on ground level but no distinctive flash

Of course these numbers are subject to the first rule of firefly watching - the little bugs move so quickly that sometimes it's hard to tell if you've seen three flies or one three times!!!

The low numbers compared with previous years is not surprising considering the very dry season we've had so far. I'll keep looking in case there is any appreciable increase in numbers which may be of interest to you.

Noel's letter piqued our curiosity so Frank and I went looking for this and another location in Brisbane. On the 29th September, after dusk, we found fireflies too numerous to count in the gully at the Mt Ommaney end of the walkway. On the 17th October at dusk we took a walk along Enoggera Creek (near Settlement Rd) and spotted five fireflies, two on the ground and three flying. On both these occasions we noticed that the fireflies became active around the time that the bladder cicadas stop calling.

In the past, on numerous occasions, we've also seen fireflies along the South Pine River at a relative's property near Samford.

If you have any firefly or other invertebrate observations, please write us a note about it.

Helen Schwencke

OMISSION

The article entitled **"Rare colony has fanatics in a flap"** which appeared in issue # 22 of the Newsletter was reprinted from the Sunshine Coast Daily, 11th July, 2001.

WORLD WIDE WEB SITES TO WATCH

Brisbane has been chosen as the venue for the 2004 International Congress of Entomology (XXII). The 2000 Congress was held (20-26th August) at Iguassu Falls in Brazil. http://www.ento.csiro.au/ice2004/

LIBRARY BOOKS FOR LOAN

The following books are currently available for loan at meetings:-

Australia's Butterflies, by Peter Wilson
Butterfly Magic, by Helen Schwencke and Frank Jordan
Australian Cicadas, by Max Moulds
Butterflies of Australia, by Common and Waterhouse, 1981
Butterfly Watching, by Paul Whalley
Flying Colours, by Mike and Pat Couper
All Colour Book of Butterflies, by Robert Goodden
Lifecycle of the Ulysses Butterfly, Video, by Janet Richardson
Lifecycle of the Cairns Birdwing Butterfly, Video, by Janet Richardson

BACK ISSUES

Back Issues of the Club Magazine are available at a cost of $1 each plus postage (3-6 copies - $1.50. 1-2 copies $1.10)

ADS AND EXCHANGES

Sometimes you may have an oversupply of butterfly larvae and your food supply will not hold out. If this happens, contact Rob MacSloy - 07 3824 4348 - who operates the Register of Host Plants. He can put you in touch with prospective "foster parents'. Have **YOU** advised Rob of the host plants you have available?

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The poster, Swallowtails of South East Queensland, compiled by the BOIC, can be obtained from BOIC, PO Box 2113, Runcorn, 4113. The cost for members is $8 plus $5 postage and handling. Non-members $12 plus $5 postage handling.

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"The Laced Fritillary" a painting by Lois Hughes. Prints now available. Phone Lois on 3206 6229.

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See Garry Sankowsky's host plant offer in September Newsletter.

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In issue #20 we featured the Chequered Swallowtail and its hostplant *Cullen tenax.* Lois Hughes has quantities of *Cullen tenax* seeds available. Send a stamped addressed envelope to 163 West Mt. Cotton Road, Mt. Cotton, Qld. 4165.

BUTTERFLY AND OTHER INVERTEBRATES CLUB PROGRAMME

December, 2001 - April, 2002

RSVP/Contact: Helen 3844 6677, fax 3844 4333, email hschwenc@dovenetq.net.au
Please let us know you are coming, particularly in case there are changes in circumstances.

Stockyard Creek, end of year BBQ and insect light trap

When: Saturday, 1st December, 2001, 4pm

Where: Stockyard Creek Conservation Park on Alperton St., Burbank (UBD Map Ref. 203 E14). It is part of the Brisbane Koala Bushland Reserves complex. The gate will be closed to the public but not locked. Please close it behind you as you drive in.

What: This end of year Club get together is to a new Brisbane City Council reserve which the Club last visited in February this year. There are excellent picnic/BBQ facilities and a pleasant creekside walk which early comers may like to avail themselves of. We have seen the Painted Skipper (*Hesperilla picta*) on the wing amongst the Sawsedge, *Gahnia clarkei*, at this time of the year. After nightfall we hope to run a mercury vapour lamp, ultra violet light trap to experience the diversity of insects in the reserve. Craig Hardy, the BBC ranger for the area will be joining us.

Bring: BBQ food for cooking, drinks, hat, insect repellent, dark glasses (Potable tank water on site)

RSVP: Contact John 3245 2997 or Helen 3844 6677

Tamborine Mountains Excursion

What: We will be visiting Eucalyptus and Rainforest on Tamborine Mountain, visiting butterfly and other invertebrate sites, we anticipate seeing birdwings. We will have lunch above Wirerope Falls
When: Sun 20th Jan, start 10.00am finishing 3.30pm
Where: Meet at the Information Centre, Doughty Park, cnr Geissmann Dve & Taylor St, North Tamborine (UBD Map Gold Coast Map 13, ref N14)
Bring: lunch, insect repellant, hat, etc

Planning and Management Meeting

What: Our planning meetings are informative and interesting, as well as planning our activities we share lots of information. All members are welcome
When: Wednesday, 6th February, 7:00 - 9:30pm
Where: Daphne's place, Manly, please contact Daphne for details 3396 6334

Introduction to local mistletoes

What: Mistletoes are hosts for many butterflies, mostly Azures and Jezabels. A tour of trees in 3 to 4 locations, spotting common mistletoes. This will get you started on finding and identifying these interesting plants.
When: Sunday, 10th February, from 9.30am – 12.30pm
Where: Starting at Bill Lamond Park, cnr Andrew St & White's Rd., Lota (UBD Map 163, N12) and afterwards you are invited to continue on with us to our Club display at Turner's Garden Centre, 473 Miles Platting Rd., Rochedale.
Bring: Morning tea and lunch, insect repellent

Turner's Garden Centre Open Day (with Club Display) in conjunction with Rod Pattison's Rare Plant Garden, Open Garden Day

When: Saturday 9th February and Sunday 10th February 2002 – 9am-4.30pm
Where: 473 Miles Platting Road, Rochedale.

AGM, Show & tell & Indigiscapes walk

When: Saturday, 2nd March, starting 2pm
Where: Redlands Indigiscapes Centre, Runnymede Rd., Capalaba (off Redland Bay Rd)
What: A short Annual General Meeting will be followed by a show & tell and a walk through the native plant gardens at Indigiscapes
Bring: Your latest slides / photos of little critters, or those you have been breeding in your garden.

Indigiscapes Centre hold their native plant sales from 10am to 1pm on this day.

If you plan to attend any of the above events please respond to the person indicated in case, for some unforeseen circumstance, the event has had to be postponed or cancelled.

DISCLAIMER

The Newsletter seeks to be as scientifically accurate as possible but the views, opinions and observations expressed are those of the authors. The Newsletter is merely a platform for people to express their views and are not necessarily those of the BOIC. If inaccuracies have inadvertently occurred and are brought to our attention we will seek to correct them in future editions. The Editor reserves the right to refuse to print any matter which is unsuitable, inappropriate or objectionable and to make nomenclature changes as appropriate.

ACKNOWLEDGMENTS

Producing this newsletter is done with to the efforts of:

- Those members who have sent in letters and articles
- Lois Hughes who provides illustrations including the cover
- Daphne Bowden who works on layout, production and distribution
- John Moss for scientific referencing and proof reading
- Helen Schwencke who developed the overall design
- Frank Jordan for inspiration

We would like to thank all these people for their contribution

ARE YOU A MEMBER

Please check your mailing label for the date your membership is due for renewal. If your membership is due, please renew as soon as possible.
Membership fees are $12.00 for Individuals/Schools and $17.00 for family membership.

Butterfly and Other Invertebrates Club Inc.
c/- PO Box 2113
Runcorn Q 4113

Next Meeting: Sunday 1st December 2001, End of Year Light Trap and BBQ at Stockyard Creek Conservation Park